THE TIOGA GROUP

SURVIVING THE EXTERNAL REVIEW

A Panelist's Perspective
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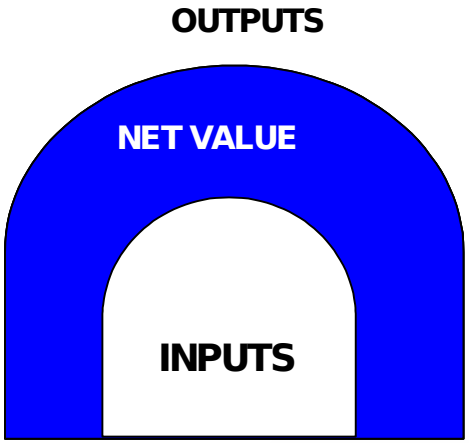
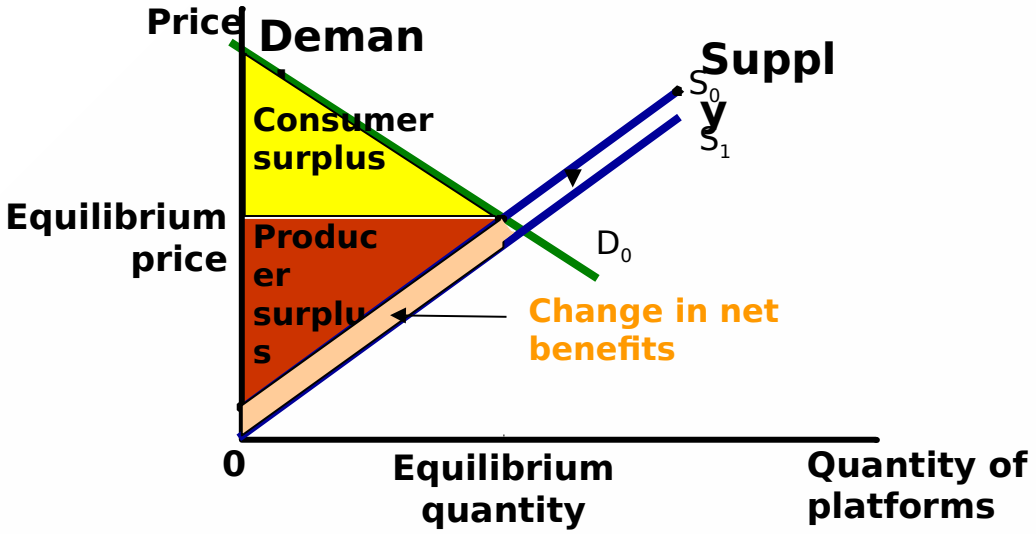




Why an External Review?

- To finish the analysis
- To protect the public interest
- To protect project sponsors and proponents
- To survive in a critical and litigious time
- To maintain credibility – now and in the future

If there is a problem you <u>want</u> the external review panel to catch it…

… because if they don't, somebody else <u>will</u>.

What is the cost?

- Delay – an external review takes time, usually more time than you think.
- Budget – an external review is expensive, usually more expensive than you think.
- Distraction – an external review will take up your time when you have better things to do.
- Frustration – explaining work you did two years ago to an uninformed “expert” for the 85th time is not fun.

What are the benefits?

- Closure – when the external review is finished, the analysis should be finished.
- No surprises – you and your team will know your project and its justification better than ever before.
- Consistency – your analysis will be consistent with guidelines, economic principles, etc.
- Reinforcement – a completed external review offers a degree of protection from uninformed critics.
- Confidence – if the work survived the external review, it should survive almost anything else.

What are the pitfalls?

Observations from External Reviews of Columbia River, Delaware River, and Port of Iberia dredging projects:

- Incomplete audit trail
- Biased or outdated information
- Errors or inconsistencies
- Deviations from USACE guidelines
- Confused economic principles
- Lack of sensitivity analysis
- Late, unplanned review

Incomplete audit trail

- The team has lots of paper, but the audit trail is not clear
- Critical numbers are unsourced
- Important documentation is missing, mis-referenced, or outdated
- Assumptions are not explicit or checked against reality

Result: delay, cost, frustration, and endless

Remedy: plan for a review from the beginning

- Maintain and manage complete documentation, date everything
- Conduct internal in-progress audits
- Make sure every number in the final report can be traced to its source and defended
- Imagine yourself on the

" There was no historical information on cargo flows through the _____ Ports to put the forecasts in context or justify confidence in the projections. The forecast documentation did not explain how the worldwide bilateral trade forecast was made specific to the _____ Ports. ….Without supporting documentation, the commodity forecasts used for the benefits estimates lacked credibility."

Biased or outdated information

- Interested parties (ports, marine operators) have supplied much of the information
- The Corps (or its consultants) have not cross-checked or verified the information independently
- A long project history results in outdated information

Result: delay.

Remedy: cross check and update

- Know who you are talking to and where they stand
- Verify every fact, pro or con
- Question numbers, meanings, relationships, and assumptions
- Look out for stale data
- Conduct your own reality checks

"…. numerous concerns existed regarding the accuracy or applicability of the $0.35/bbl lightering price estimate. It is not clear that this is the price that applies to changes in lightering volumes for any one customer. Also, it appears likely that at least some ___ customers will pay higher prices under the with project condition. Finally, ___ recently changed the estimate to $0.37 per barrel."

Errors or inconsistencies

- Data has been around so long that no one questions it anymore
- Spreadsheets and models have been revised since being documented or audited
- No one has compared the current report version to original source documents
- Quick fixes have been made to meet deadlines

Result: delay, embarrassment,

Remedy: double check, audit, and triple check

- Go through the picky details of spreadsheets and models after any revisions
- Explain what you did to outsiders
- Make audit tools and QA techniques work for you
- If you don't have time to do it right the first time….

"The audit did not take exception to the model's purported application of tanker cost data to container ship costing, did not question the use of undocumented carrier estimates for 2003 TEU volumes, and did not question the model's use of increased annual calls for services that typically have fixed frequency. In other words, the audit did not critically examine the methodology or conduct a reality check."

Deviations from USACE guidelines

- Corps staff, consultants, or sponsors are unfamiliar with current USACE guidelines and policies
- Corps guidelines have been ignored or "bent" under outside pressure
- Reports predate current guidelines
- The analysis has "wandered" since the initial plan

Result: delay, rework, and

Remedy: compare current analysis to current guidelines

- Make doubly sure you know current guidelines and polices
- Make explicit references to guidelines and any differences
- If you deviate from guidelines and polices, know where and why
- Ask HQUSACE for clarification before the external review

- *(b) Contributions to national economic development (NED) are increases in the net value of the national output of goods and services, expressed in monetary units. Contributions to NED are the direct net benefits that accrue in the planning area and the rest of the nation. Contributions to NED include increases in the net value of those goods and services that are marketed, and also of those that may not be marketed.* .....(P&G)

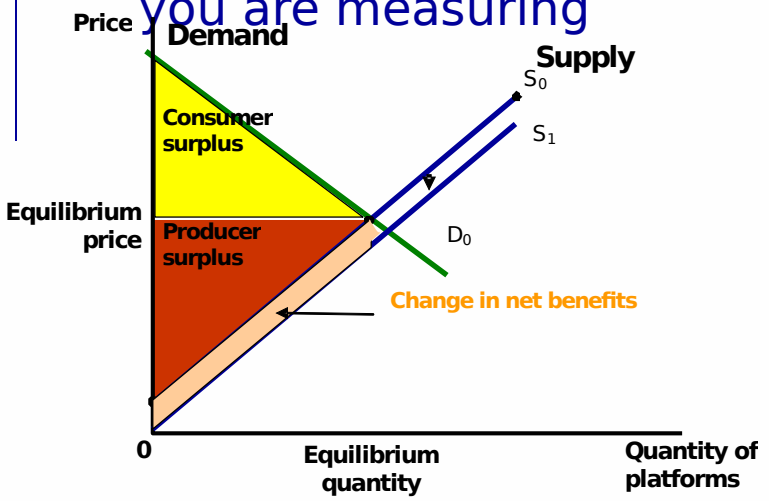
Confused economic principles

- NED benefits have not been clearly distinguished from transfers
- Resource costs and values have not been clearly delineated
- Single port and multiport issues are confused
- Project advocates are stretching the benefits definition

Result: delay, rework, and *major cuts in benefit estimates*

Remedy: be an economist

- Rethink the analysis in terms of basic economic principles
- Be very careful with nomenclature
- Make sure you are measuring what you think you are measuring



Lack of sensitivity analysis

- The analysis depends on a few critical numbers or relationships that have not been tested
- Item such as conversion factors and industry averages have been used without checking ranges or applicability
- Corps and consultant staff cannot answer “What if..?”
- Project risks are unknown

Result: delay, rework, and

Remedy: ask “What if..?” as you go along

- Follow and exceed Corps guidelines for sensitivity analysis
- Take advantage of spreadsheet and model flexibility to probe risks
- Know and document your vulnerabilities – “Cover Your Analysis”

Q: How do you convert 100,000 TEU to a container count?

A: Divide by 2 and get 50,000 containers

B: Divide by 1.6 and get 63,500 containers

Late, unplanned review

- The Corps is facing pressure from project advocates to move faster
- Staff and consultants have worked together for months or years and agree on everything
- External review is seen as an imposition or formality
- Neither staff nor sponsors are prepared for serious review

Result: delay, extra cost

Remedy: combine *serious* internal review with an earlier external review

- Know what an external review will entail
- Be realistic about schedule and cost
- Be careful about what you promise sponsors
- Get your ducks in a row and keep them there

"In view of the concerns expressed above regarding the benefits estimates and other factors, the review panel found that the September 2002 version of the Comprehensive Economic Reanalysis Report did not yet provide a sound basis for economic justification of the project..."

What do we do about it?

- Start early, and plan for an early review.
- Marshall ALL documentation – with exact titles, versions, and dates – to maintain a clear audit trail.
- Make sure every number in the final report can be traced to its source and defended. Do your own reality checks.
- Verify information from interested parties (pro or con).
- Double- and triple-check spreadsheets and models.
- Check every point of the analysis against Corps guidelines, and identify and explain any deviation.
- Be an economist – go back to basic principles
- Run sensitivity analyses on every variable, and probe those that uncover significant sensitivities.
- Start early, and plan for an early review.